From: Benjamin Shorr
To: Robert Gensemer

Cc: <u>Eric Blischke/R10/USEPA/US@EPA; Robert.Neely@noaa.gov; Ron.Gouguet@noaa.gov; Brad Hermanson; Carrie</u>

Smith; Jim Koloszar; Margaret Spence; Jay Field

Subject: Re: Rd. 2 Data Review- initial spatial analyses

Date: 12/21/2006 09:10 AM

Bob-

The files currently on the NOAA ftp site (draft) are:

pah_sereis1_RiverMiles.pdf; pah_series2_FandT.pdf; pah_series3_AOPC.pdf = 3
series maps showing PAH's summarized by River Miles, AOPC's, and Fate and
Transport Segments.
ph_base_121806.pdf = 1 map of the River Miles with an explanation of areas.
fpm_series1.pdf & lrm_series1.pdf = 2 map series with Logistic Regression &
Floating Percentile (separate- probably more effective to map them together)
rm_surfsed_cat1risk_pah.xls = Excel Table & Graphs: Total PAHs graphed by
River Mile and side, Total
clam_totalpah_Identity2.xls = PAHs in clams (these in particular are not
perfect)
Multichem_statssummary_20061219.doc = Word Doc: Screenshots of selected
analytes in surface sediment Histograms & QQPlots
surfsed_cat1risk_pah_autodoc.txt = Metadata: Query Manager auto-documentation
(example)

I just added the LRM & FPM figures- all draft of course.

Also, I posted some examples for discussion on our ftp site:

I've posted some examples of mapping and Excel graphs (with data tables) for discussion. There may be errors- I've been using these as a test to explore the data and the processes.

Non-Responsive

Robert Gensemer wrote:

Thanks, all, for the replies. Ben, Carrie, Jim, and Margaret are all available tomorrow afternoon, so lets go for 2pm for a planning call to go over Ben's observations/questions, and get organized and going on analyses.

Lets us my callin number: Non-Responsive

Ben: In advance, could you send around a quick list of files we should have in front us on computer screens if we need to refer to them? Thanks.
-Bob

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Benjamin Shorr
<Benjamin.Shorr@noaa.gov> 12/20/06
11:02 AM >>>

Bob & Eric et al-

 $\ensuremath{\text{I've}}$ been going through the contaminant and spatial data and coming up

with a methodology/process for querying and summarizing spatially to

meet the needs of inputs to HH, ER, BSAF and the other analyses, and $\,$

mapping/graphing. I've created some base GIS layers that we can uses to

summarize/assign location to contaminant data (River Miles & Fate and

Transport segments) and have come up with a couple of observations/questions:

1. The reference value table should probably be in the same units as

the database (Query Manager) with a clear indication of what quideline

or value was chosen based on the priority preference. This will help

with identifying the sources in tables/graphs/figures.

Additionally,

the Chem names should be translated into the Chemcodes in Query Manager-

this should help with ensuring consistency between sed/tissue/bioassay &

water data & using a look-up table.

2. Statistics: For summarized data- fate and transport segments, $\ensuremath{\operatorname{River}}$

Miles, nearshore receptor habitat etc. I have explored a bit how best

to calculate 95% UCL's and perhaps UPLs (using surface sediment as a

test case) for 8 metals, Total PAH, PCBs, DDT, Dieldrin. Generally, $\$

these contaminants are distributed log-normally (entire site). We should discuss the best and most appropriate way to incorporate/present

UCLs/UPLs. Generation of the following statistics for the sub-

summation is a standard part of the methodology: Min, Max, Count, Mean.

SD and Variance.

I've also found that generating a master contaminant data query from $% \left(1\right) =\left(1\right) +\left(1\right$

Query Manager has some limitations in the GIS because of the -999 entry

for non-tested analytes at a station. This just means that folks doing

mapping & analysis need to coordinate on what queries should be used for

what pieces.

3. Non-detects or below detection limit: It's important to understand how Query Manager queries handle these selections- and how the inputs for the different analyses should be created. We should discuss this.

4. Inclusion/Exclusion of areas like GASCO, T4, McCormick & Baxters:

how should data that is in these areas be handled for this data review?

Temporally, what data should be used for analysis and presentation

this Rd. 2 Data Review?

I've posted some examples of mapping and Excel graphs (with data tables)

for discussion. There may be errors- I've been using these as a test to

explore the data and the process.

Non-Responsive

Maps: 3 series maps showing PAH's summarized by River Miles, AOPC's, and

Fate and Transport Segments. 1 map of the River Miles with an explanation of areas.

Excel Table & Graphs: Total PAHs graphed by River Mile and side, Total

PAHs in clams (these in particular are not perfect) Word Doc: Screenshots of selected analytes in surface sediment

Histograms & QQPlots

Metadata: Query Manager auto-documentation

I'm sure there is more, but these are initial observations after running

through the data a bit, hopefully we can discuss and begin moving forward systematically.

Thanks,

Ben

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http://response.restoration.noaa.gov/orr_about.php